

Docket No.: M1103.70230US00  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Vivek Bhanu et al.  
Serial No.: 10/724,843  
Confirmation No.: 2170  
Filed: December 1, 2003  
For: SMART SCAN FOR BLUETOOTH PAN DEVICES  
Examiner: L. Liu  
Art Unit: 2145

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Dated: Apr. 14, 2009

Signature: Deville Calder

**REPLY BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Madame:

This Brief is filed in response to the Examiner's Answer, mailed November 14, 2008.

**I. STATUS OF CLAIMS**

**A. Total Number of Claims in Application**

There are 21 claims pending in the application.

**B. Current Status of Claims**

1. Claims canceled: none
2. Claims withdrawn from consideration but not canceled: None
3. Claims pending: 1-21
4. Claims allowed: None
5. Claims rejected: 1-21

**C. Claims On Appeal**

The claims on appeal are claims 1-21.

## **II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Whether independent claim 1 and claims 2 and 3 (which depend from claim 1) are properly rejected under 35 U.S.C. 103(a) over Rune (publications no. US 2003/0060222 A1), Melpignano (U.S. 7,193,989 B2) and Virtanen (publications no. US 2003/0124978 A1).

Whether independent claim 7 and claims 11 and 12 (which depend from claim 7) are properly rejected under 35 U.S.C. 103(a) over Rune (publications no. US 2003/0060222 A1), Melpignano (U.S. 7,193,989 B2) and Virtanen (publications no. US 2003/0124978 A1).

Whether independent claim 14 is properly rejected under 35 U.S.C. 103(a) over Rune (publications no. US 2003/0060222 A1), Melpignano (U.S. 7,193,989 B2) and Virtanen (publications no. US 2003/0124978 A1).

Whether independent claim 18 and claims 19-21 (which depend from claim 18) are properly rejected under 35 U.S.C. 103(a) over Rune (publications no. US 2003/0060222 A1), Melpignano (U.S. 7,193,989 B2) and Virtanen (publications no. US 2003/0124978 A1).

Whether dependent claim 4 is properly rejected under 35 U.S.C. 103(a) over Rune (publications no. US 2003/0060222 A1), Melpignano (U.S. 7,193,989 B2) and Virtanen (publications no. US 2003/0124978 A1).

Whether dependent claim 5 is properly rejected under 35 U.S.C. 103(a) over Rune (publications no. US 2003/0060222 A1), Melpignano (U.S. 7,193,989 B2) and Virtanen (publications no. US 2003/0124978 A1).

Whether dependent claims 6, 10 and 17 are properly rejected under 35 U.S.C. 103(a) over Rune (publications no. US 2003/0060222 A1), Melpignano (U.S. 7,193,989 B2) and Virtanen (publications no. US 2003/0124978 A1).

Whether claim 8 (which depends from claim 7) and claim 15 (which depends from claim 14) are properly rejected under 35 U.S.C. 103(a) over Rune (publications no. US 2003/0060222 A1), Melpignano (U.S. 7,193,989 B2) and Virtanen (publications no. US 2003/0124978 A1).

Whether dependent claims 9 and 16 are properly rejected under 35 U.S.C. 103(a) over Rune (publications no. US 2003/0060222 A1), Melpignano (U.S. 7,193,989 B2) and Virtanen (publications no. US 2003/0124978 A1).

Whether dependent claim 13 is properly rejected under 35 U.S.C. 103(a) over Rune (publications no. US 2003/0060222 A1), Melpignano (U.S. 7,193,989 B2) and Virtanen (publications no. US 2003/0124978 A1).

Arguments for reversal for each of the above identified grounds for review are presented separately below. Accordingly, claims 1, 4, 5, 6, 7, 8, 9, 13, 14 and 18 do not stand or fall together.

### **III. ARGUMENT**

Appellant respectfully requests that the Examiner's final rejection of all the claims be reversed.

#### **A. Comments on Grounds of Rejection**

In Section (9), the Answer substantially restates the grounds for rejection in the Final Office Action of December 11, 2007. Though Applicants do not agree with the points made in this section, Applicants affirm their position pointing out the errors in the grounds of rejection as stated in the Appeal Brief, and will not further comment on the Grounds of Rejection in Section (9).

#### **B. Comments on Response to Arguments**

In Section (10), the Answer states new arguments to justify the rejection of the claims, including more detailed explanation of the Examiner's interpretation of the references. Applicants point out below the following additional errors made in Section (10) of the Answer.

##### **i) Subpart (6) of the Answer**

In subpart 6, the Examiner asserts that temporary storage of information in a register inherently occurs as a part of a page scan in the system of Rune and declares this temporary storage to create a page scan cache. To support this position, the Examiner quotes a definition from Wikipedia, highlighting the portion of the definition relating to temporary storage. The Examiner does not highlight, or even comment on, the rest of the definition, which indicates that the information in a cache is "likely to be used again."

Even if there is temporary storage of a page scan information in Rune, there is no basis for the assertion that such data will be retained after it is used once or that it is used again. Rather, Rune describes that once the inquiry scan transceiver in a network access point (NAP) sends

information to a roaming device, the roaming device will communicate with the page scan transceiver to establish a connection. If that connection is established, there is a “hand over” from the page scan transceiver to a traffic transceiver (Rune, ¶¶ 33-34). To summarize Rune, the page scan transceiver looks for a communication from a roaming device (i.e. a page), but, once the communication is detected, the page scan transceiver is not further involved in communication with the roaming device. Therefore, there is no basis for the assertion that data temporarily stored in a register during this process is stored because it is *likely to be used again*, and one of skill in the art could not reasonably interpret Rune as disclosing a page scan cache, even under the Examiner’s definition.

Moreover, even if temporary storage of information in a register that inherently occurs when a network access point receives a communication from a roaming device were regarded as creating a page scan cache, that eventuality only highlights other errors in the rejections. The rest of the rejection can only be sustained if all limitations of the claims are satisfied with the temporary storage register of Rune substituted for the claimed “page scan cache.” Such is not the case.

Every claim on appeal is rejected based on a combination of at least three references: Rune, Melpignano and Virtanen. Accepting, *arguendo*, the Examiner’s interpretation of Rune, all rejections require interchanging the temporary storage register of Rune and the telephone directory of Virtanen (¶26). However, there is no basis for such a substitution. A temporary storage register and the telephone directory serve different functions. Interchanging these components would interfere with the objective of Virtanen of displaying devices with names recognizable to a user (because they are obtained from the user’s telephone directory). Likewise, interchanging these components would disrupt the function of the temporary register of Rune by replacing it with more permanent storage that holds information about devices that are not actually paging the Network Access Point. Thus, rather than bolster the rejection, identifying the temporary register of Rune as a “page scan cache” simply highlights that the rejection is premised on hindsight reconstruction of the invention that involves selecting disparate bits and pieces of unrelated references. Such a rejection is clearly in error and cannot be sustained.

As an example of a further problem that arises from deeming a temporary storage register of Rune to be a page scan cache, other claim limitations that recite attributes or acts associated with the use of the page scan cache make no sense. For example, claim 1 recites “each entry in the page scan cache that the local device successfully contacts by way of a page scan.” There is no basis for the assertion that the local device uses the information in the temporary register of Rune to contact devices. As another example, claim 4 further qualifies claim 1, by reciting “the page scan is performed in response to the configuration service polling for the list.” There is no basis for the assertion that information in the temporary register is used to identify devices to contact by way of a page scan in response to a configuration service polling for a list of visible devices.

Claim 5 recites that “the page scan cache … is associated with an expiration policy.” There is no basis for the assertion that an expiration policy would be associated with a register inherently used to temporarily store information, as hypothesized by the Examiner. Claims 9 and 16 are even more explicit concerning management of the cache and likewise recite limitations that are not met with the Examiner’s interpretation of a temporary storage register as a cache.

Similarly, with this new interpretation of a “page scan cache,” it is readily apparent that limitations of claims such as 8 and 15 are not met. Claim 8 recites: “for each entry in the page scan cache, performing a page scan, and, if the page scan was successful, adding the entry to the list of visible remote devices.” Even if information is temporarily stored in a register of Rune as part of a page scan, there is no basis for the assertion that it is used as recited in claims 8 or 15.

ii) Subpart (7) of the Answer

As regards subpart 7, the Examiner asserts that storing information in temporary storage in Melpignano constitutes refreshing the page scan cache. In the cited passage (col. 10, lines 48-49), Melpignano describes a mobile terminal paging candidate access points from a list. The access points on the list are paged sequentially until the mobile terminal can connect to one of them. The origin of the list is not specified, and it does not appear that the Examiner regards this list as a “page

scan cache.” Rather, as understood, the Examiner asserts that somewhere in the process of paging, the results are temporarily stored, which creates a cache.

Now that the Examiner has been more precise about the basis of the rejection, it is even more clear that the rejection is flawed. The rejection assumes that temporary storage in Rune is the same as temporary storage in Melpignano. More particularly, the rejection assumes that temporary storage of data in Melpignano teaches refreshing the information that is temporarily stored in Rune. However, the temporary storage assumed to exist in each reference serves a different function and there is no basis to combine these disparate functions from the references as would be required to meet all limitations of any of the claims.

In Rune, the temporary storage is assumed to hold an identification of a remote device that has paged the device containing the temporary storage. In Melpignano, the temporary storage is assumed to hold an identification of an access point that the device has contacted. As the Examiner maps these references to the claims, the information identifying an access point is used to refresh a “cache” identifying the remote device. There is no reason that one of skill in the art would use different types of information interchangeably in this fashion. Thus, rather than demonstrate that Melpignano teaches refreshing the cache as claimed, the Answer makes clear that the rejection is based on the hindsight reconstruction of the invention using unrelated portions of the references.

iii) Subpart (8) of the Answer

The Examiner cites several subparts of M.P.E.P. 2143 and the Supreme Court’s decision in *KSR* as justifying the rejections. Applicants disagree that the rejection meets the standard set in any subpart of M.P.E.P. 2143 or in *KSR*. For example, subpart (A) states: “combining prior art elements according to known methods to yield predictable results.” Yet, none of the prior art demonstrates that it was known to use an inquiry scan cache and a page scan cache to generate a list of visible devices as recited in the claims. Thus the standard of subpart (A) is not met. Similarly, subparts (C) and (D) do not apply, as both of these relate to application of “known techniques.”

Subpart (B) states: “simple substitution of one known element for another to obtain predictable results.” However, the rejection is based on combinations of elements selected from three different references – not simple substitution of elements known to serve the same purpose. Subpart (E) is equally inapplicable, relating to selection from a finite number of choices, not a combination of elements to perform a function that is not shown in any of the references.

Subpart (G) relates to a teaching, suggestion or motivation to make a combination. However, there is no teaching, suggestion or motivation articulated in the rejection – and there is none. There is no teaching, suggestion or motivation for one of skill in the art to use one type of information from Melpignano to refresh a temporary storage register holding a different type of information in Rune. There is no teaching, suggestion or motivation for one of skill in the art to use the telephone directory of Velpignano in place of the temporary storage register of Rune. Thus, there is no teaching, suggestion or motivation to combine elements of at least three different references as asserted in the Final Rejection.

In short, the hindsight selection of elements from separate references as is done in the Final Rejection does not make a *prima facie* case of obviousness, regardless of which test for obviousness is applied.

iv) Subpart (9) of the Answer

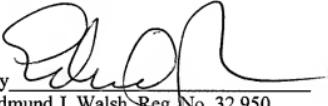
Applicants respectfully disagree with the characterization of paragraphs 20-21 and 32-33 of Virtanen. Paragraphs 20-21 describe the operating modes through which a device may progress in forming a Bluetooth connection. Those modes include “inquiry” and “page.” Paragraphs 32-33 relate to displaying information only as part of the inquiry mode (see ¶32, line 3). The display may be based on information stored in advance (see ¶32, line 12), such as in a telephone directory (¶26). However, these passages do not describe information obtained in a page scan and certainly do not describe concatenation of information from a page scan and an inquiry scan, as asserted.

**IV. CONCLUSION**

For the reasons stated in the Appeal Brief, and for the foregoing reasons, all of the claims on appeal are not obvious in light of Rune, Melpignano and Virtanen. Accordingly, the rejections of all claims should be reversed.

Dated: 1/14/09

Respectfully submitted,

By   
Edmund J. Walsh, Reg. No. 32,950  
WOLF, GREENFIELD & SACKS, P.C.  
Federal Reserve Plaza  
600 Atlantic Avenue  
Boston, Massachusetts 02210-2206  
(617) 646-8000